UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,851	05/09/2002	Serge Saint-Dizier	0512-1007	2474

466 7590 01/11/2005

YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER	
MUSSER, BARBARA J	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/049,851	SAINT-DIZIER, SERGE	
	Examiner	Art Unit	
	Barbara J. Musser	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 20-28, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moffitt et al.(WO 98/31524) in view of Spengler et al.(U.S. Patent 4,923,539)

Moffitt et al. discloses applying a pre-cut second layer to a pre-cut first larger layer, placing the composite in a mold, closing the mold so that the composite takes the shape of the mold, and injection molding foam behind it so that the second layer remains visible.(Abstract; Figure 4) The reference does not disclose placing the composite in a clamping frame which positions the composite in the mold and trimming off the excess clamping margin after molding. Spengler et al. discloses placing a layer in a mold using a clamping frame, shaping it to the shape of the mold using vacuum, injection molding behind it, and cutting off the clamping margin.(Figure 5; Col. 6, ll. 58-Col. 7, ll. 15) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the first layer of Moffitt et al. larger and use a clamping frame with it, the clamping margin of which is then removed after molding since this would allow accurate placement of the composite every time as shown by Spengler et al. particularly since Moffitt et al. does not show the edges of the mold and discloses

further processing can occur to the product(Pg. 5, ll. 15-16) and since Moffitt et al. shows a clamping/holding element in a different portion of the process(Figure 1), indicating that such elements are known in general in the trim forming arts.

Moffitt et al. does not specifically disclose when the composite is shaped to the shape of the mold. However, when the vacuum is used, one in the art would appreciate that it could be used before, during, or after closure of the mold. Additionally, when a vacuum was not used, the closing of the mold would press the composite against the mold surface, shaping it to a portion of the mold surface.

Regarding claim 21, the secondary layer is secured to the main layer using adhesive.(Pg. 2, ll. 8)

Regarding claim 22, one in the art would appreciate that when the main layer is held in a clamping frame and the mold is closed, the injection of resin forces the layers against the mold surface, stretching them. While the reference indicates vacuum may be used to hold the layer in the frame, this is clearly optional as indicated by the use of the word "may".(Pg. 5, ll. 5-6) When this vacuum is not present, the layers are stretched by the closing of the mold and the injection of the resin.

Regarding claims 23 and 24, the references cited above do not disclose a foam layer being between the secondary layer and the main layer. Spengler et al. discloses secondary layers made of multiple sheets including one having a foam padding.(Col. 5, ll. 35-38) The foam padding is smaller than the size of the secondary layer so that it is completely covered by the secondary layer.(Figure 4) It would have been obvious to one of ordinary skill in the art at the time the invention was made to place a small piece

of foam between the main layer and the secondary layer since this is a known type of insert in the trim panel of an automobile(Abstract), the same type of product as Moffitt et al.(Abstract), and since this allows the trim panel to have different density foams in different locations.

Regarding claims 24 and 25, Spengler et al. states the secondary layers may be made in any manner known in the art.(Col. 5, ll. 41-44) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use adhesive to bond the foam to the secondary layer since this would prevent movement of the layers relative to one another and since Spengler et al. discloses the secondary layers can be made in any manner known in the art.(Col. 5, ll. 41-44)

Regarding claim 27, while Spengler et al. only shows holding a portion of the main layer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to clamp around the entire periphery of the main layer since this would insure even stretching of the material during the molding process.

Regarding claim 28, while the references do not disclose the secondary layer being at the edge of the main layer, one in the art would appreciate that this would depend on the desired final location of the secondary layer in the product and it would have been obvious to one of ordinary skill in the art at the time the invention was made to place the secondary layer at the edge of the main layer when it was desired to have the secondary layer at the edge of the main layer in the final product and to not clamp the secondary layer as using that section as a clamping margin would increase the cost since a portion of the secondary layer would be discarded.

Regarding claim 30, Moffitt et al. discloses forming the composite by placing the main layer in a die, placing the secondary layer in a recess in a punch which cooperates with the die, applying the punch to the main layer, and removing it, leaving the secondary layer attached to the main layer.(Figures 1, 2A; Pg. 2, ll. 10-11; Pg. 4, ll. 1-13)

Regarding claim 31, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a common reference system for all the parts as this would insure proper alignment of all the parts and layers.

3. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moffitt et al. and Spengler et al. as applied to claim 20 above, and further in view of Savonuzzi(EP 0482270A1).

The references cited above do not disclose a thermal protection sheet between the main layer and the foamed material. Savonuzzi discloses applying a thermoplastic shielding layer to the back of layers which are to be injection molded against to prevent the injectable material from permeating through the main layer.(Abstract) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a thermal protection layer to the back of the main layer to prevent the injected resin from permeating through the main layer damaging the product and to prevent heat damage to the main layer.(Abstract)

Response to Arguments

4. Applicant's arguments filed 10/18/04 have been fully considered but they are not persuasive.

Regarding applicant's arguments with regards to Barber et al., those arguments are moot as the reference is no longer part of the rejection.

Regarding applicant's argument that Moffitt et al. has vacuum ports and therefore a clamping frame would not have been needed, Moffitt et al. indicates the vacuum is only exemplary, as indicated by the use of the word "may." Additionally, Spengler et al. shows it is known to use vacuum in combination with a clamping frame. The use of such frames to hold articles in place in molds when injection molding against a clamped film is well-known and conventional in the molding fields, so well known that they are often not shown. Such frames allow accurate placement of the trim relative to the mold and can be used to index the trim from one location to another, particularly considering Moffitt et al. appears to show part of a clamping device which holds the trim before the secondary material is attached to it.(Figure 1)

Regarding applicant's argument that Moffitt et al. does not show step 5 of the process, Moffitt et al. does not disclose when the vacuum is used to pull the composite against the mold. Additionally, when the vacuum is not used, the closing of the mold presses the composite against the mold surface, forming a portion of it to the shape of the mold.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara J. Musser whose telephone number is (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571)-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJM

BLAINE COPENHEAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700